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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,557	01/16/2004	Edward Eytchison	SONY-24100	8128

7590 12/12/2007
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EXAMINER

MOUZON, LAJUANIA N

ART UNIT	PAPER NUMBER
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2153

MAIL DATE	DELIVERY MODE
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12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/759,557

Applicant(s)

EYCHISON, EDWARD

Examiner

La Juania N. Mouzon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Applicant's Amendment filed 9/26/2007.
Claims 1-44 are pending.

Drawings

2. Applicant's amendments to the drawings filed on 9/26/2007, have been fully considered and are persuasive. The objections to the drawings have has been withdrawn.

Response to Arguments

3. Applicant's arguments, see pg. 11, filed 9/26/2007, with respect to 112 2nd rejection for claim 20 have been fully considered and are persuasive. The 112 2nd rejection for claim 20 has been withdrawn.
4. Applicant's arguments filed 9/26/2007 have been fully considered but they are not persuasive. In regards to claims 1 the applicant argues that "Cheng does not teach communicating with a rendezvous type device (pg. 12 remarks)".
5. Examiner respectfully disagrees. Cheng teaches rendezvous type devices such as non-UPnP devices (i.e. HomeRF devices, Bluetooth devices, etc.) (**¶0018 line(s) 8-**

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14 and ¶0019 line(s) 15-21). Therefore, Cheng clearly teaches the argued claimed limitation.

6. Furthermore, the applicant argues that “Cheng does not teach bridging communications between a rendezvous type device and a universal plug and play type device (**pg. 12 remarks**)”.

7. Examiner respectfully disagrees. Cheng teaches bridging communications between a rendezvous type device and a universal plug and play type device (**¶0018 line(s) 1-4 and ¶0019 line(s) 15-21**). Likewise the Examiner notes that Cheng teaches the non-IP devices conforming to standards and protocols (**¶0019 line(s) 15-21**).

8. The applicant argues that a rendezvous type protocol uses the standard IP networking protocol (**pg. 12 remarks**).

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a rendezvous type protocol uses the standard IP networking protocol) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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10. The applicant argues the same for claims 6, 20, 29, and 38. Therefore, the same reasoning as above is also applied to claims 6, 20, 29, and 38.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-18, 20-27, 29-36, 38-43, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheng (US PGPub 2002/0078161).

13. In regards to claim 1 Cheng discloses, a method of bridging communications between a universal plug and play type device (**Fig. 1 #120**) and a rendezvous type device (**Fig. 1 #150-180**) (**¶0018 line(s) 1-5, teaches a method for bridging a universal plug and play (UPnP) and non-universal plug and play (N-UPnP or rendezvous) communications.)** comprising:

- a. receiving a communication from the universal plug and play type device for the rendezvous type device (**¶0022 line(s) 1-4, teaches receiving a communication from a UPnP device for a N-UPnP device.);**

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- b. converting the communication into the rendezvous type protocol thereby forming a converted communication (**¶0022 line(s) 6-8, teaches converting the communications for producing a converted communication.**); and
- c. transmitting the converted communication to the rendezvous type device (**¶0022 line(s) 8-12, teaches transmitting the communication to the N-UPnP device.**).

14. In regards to claims 2, 7, 12, 21, and 30 Cheng discloses, wherein the universal plug and play type device is coupled within a network of universal plug and play type devices (**Fig. 1 #100 and ¶0020 line(s) 12-19, teaches whereas each network is homogenous by stated that the UPnP enabling device connects multiple heterogeneous-networks.**).

15. In regards to claims 3, 8, 13, 22, and 31 Cheng discloses, wherein the rendezvous type device is coupled within a network of rendezvous type devices (**Fig. 1 #100 and ¶0020 line(s) 12-19, teaches whereas each network is homogenous by stated that the UPnP enabling device connects multiple heterogeneous-networks.**).

16. In regards to claims 4, 9, 14, and 39 Cheng discloses, wherein converting the communication is performed by a conversion circuit (**Fig. 2 #220 and ¶0022, teaches the processor converting the communication.**).

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17. In regards to claims 5, 10, 15, 33, and 40 Cheng discloses, wherein the conversion circuit is programmed by the universal plug and play type device or the rendezvous type device (**¶0040-¶0042, teaches the circuit being programmed by the UPnP device.**).

18. In regards to claim 6 Cheng discloses, a method of bridging communications between a rendezvous type device (**Fig. 1 #150-180**) and a universal plug and play type device (**Fig. 1 #120**) (**¶0018 line(s) 1-5, teaches a method for bridging a universal plug and play (UPnP) and non-universal plug and play (N-UPnP or rendezvous) communications.**) comprising:

- d. a. receiving a communication from the rendezvous type device for the universal plug and play type device (**¶0022 line(s) 1-4, teaches receiving a communication from N-UPnP a device for a UPnP device.**);
- e. b. converting the communication into the universal plug and play type protocol thereby forming a converted communication (**¶0022 line(s) 6-8, teaches converting the communications.**); and
- f. c. transmitting the converted communication to the universal plug and play type device (**¶0022 line(s) 8-12, teaches transmitting the communication to the N-UPnP device.**).

19. In regards to claim 11 Cheng discloses, a converter (**Fig 1 #200**) configured to couple between a universal plug and play type device (**Fig. 1 #120**) and a rendezvous

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type device (**Fig. 1 #150-180**) to convert communications between the universal plug and play type device and the rendezvous type device into proper formats (**¶0020 line(s) 12-19, teaches the UPnP enabling device (converter) for converting communications for multiple heterogeneous-networks, UPnP and N-UPnP.**), comprising:

- g. a. a universal plug and play type interface circuit configured to couple to a universal plug and play type device operating under a universal plug and play type protocol (**Fig. 2 #210 and ¶0022 line(s) 1-6, teaches a IP Network interface used for sending and receiving UPnP protocols being part of the UPnP enabling device (converter) circuit.**);
- h. b. a rendezvous type interface circuit configured to couple to a rendezvous type device operating under a rendezvous type protocol (**Fig. 2 #250_{a-d} and ¶0021, teaches varies N-UPnP interfaces, as part of the converter circuit, used for sending and receiving N-UPnP protocols.**); and
- i. c. a conversion circuit coupled between the universal plug and play type interface circuit and the rendezvous type interface circuit (**Fig. 1 #200 and Fig. 2**), wherein the conversion circuit converts communications directed from the universal plug and play type device to the rendezvous type device into the rendezvous type protocol, and further wherein the conversion circuit converts communications directed from the rendezvous type device to the universal plug and play type device into the universal plug and play type protocol (**¶0022,**

teaches the UPnP Enabling Device converting the communication to communicate between the networks in the proper protocols.).

20. In regards to claims 16, 25, and 34 Cheng discloses, wherein the converter is a stand-alone device (**Fig. 1 #200, teaches the UPnP Enabling Device (converter) as a stand-alone device.**).

21. In regards to claims 17, 26, 35, and 42 Cheng discloses, wherein the converter is implemented within the universal plug and play type device or the rendezvous type device (**¶0090, teaches that any combination of any hardware and software, as well as any system configurations, can be used and the figures are examples and can be modified. Therefore, the combination of the converter within one of the devices would be inherent.**).

22. In regards to claims 18, 27, 36, and 43 Cheng discloses, wherein the universal plug and play type interface circuit comprises a universal plug and play type proxy (**Fig. 5 #220 and ¶0031 teaches a UPnP proxy.**) which maintains a table of entries, each entry corresponding to a rendezvous type device (**Fig 5. #504 and ¶0035 teaches a table for keeping track of each network.**).

23. In regards to claim 20 Cheng discloses, a converter (**Fig 1 #200**) configured for coupling between a universal plug and play type device (**Fig. 1 #120**) and a rendezvous type device (**Fig. 1 #150-180**) to convert communications between the universal plug

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and play type device and the rendezvous type device into proper formats (**¶0020 line(s) 12-19, teaches the UPnP enabling device (converter) for converting communications for multiple heterogeneous-networks, UPnP and N-UPnP.),** comprising:

- j. a. means for interfacing to a universal plug and play type device configured for coupling to the universal plug and play type device operating under a universal plug and play type protocol (**Fig. 2 #210 and ¶0022 line(s) 1-6, teaches a IP Network interface as a means for sending and receiving UPnP protocols.);**
- k. b. means for interfacing to a rendezvous type device configured for coupling to the rendezvous type device operating under a rendezvous type protocol (**Fig. 2 #250_{a-d} and ¶0021, teaches varies N-UPnP interfaces as a means for sending and receiving N-UPnP protocols.);** and
- l. c. means for converting coupled between the means for interfacing to a universal plug and play type device and the means for interfacing to a rendezvous type device (**Fig. 1 #200 and Fig. 2)** wherein the means for converting converts communications directed from the universal plug and play type device to the rendezvous type device into the rendezvous type protocol, and further wherein the means for converting converts communications directed from the rendezvous type device to the universal plug and play type device into the universal plug and play type protocol (**¶0022 , teaches the UPnP Enabling**

Device as a means for converting the communication for a means for communicating between the networks in the proper protocols.).

24. In regards to claim 23 Cheng discloses, wherein a conversion program used by the means for converting is stored within the means for converting (**¶0022, teaches means for the program that converts the communication is stored in the processor.).**

25. In regards to claim 24 Cheng discloses, wherein the means for converting is programmed by the universal plug and play type device or the rendezvous type device (**¶0040-¶0042, teaches means for the circuit being programmed by the UPnP device.).**

26. In regards to claim 29 Cheng discloses, bridge device (**Fig 1 #200**) configured for coupling between a universal plug and play type device (**Fig. 1 #120**) and a rendezvous type device (**Fig. 1 #150-180**) for converting communications between the universal plug and play type device and the rendezvous type device into proper formats (**¶0020 line(s) 12-19, teaches the UPnP enabling device (bridge) for bridging communications for multiple heterogeneous-networks, UPnP and N-UPnP.), comprising:**

m. a. a universal plug and play type interface circuit configured to couple to a universal plug and play type device operating under a universal plug and play

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type protocol (**Fig. 2 #210 and ¶0022 line(s) 1-6, teaches a IP Network interface used for sending and receiving UPnP protocols.);**

n. b. a rendezvous type interface circuit configured to couple to a rendezvous type device operating under a rendezvous type protocol (**Fig. 2 #250_{a-d} and ¶0021, teaches varies N-UPnP interfaces used for sending and receiving N-UPnP protocols.);** and

o. c. a conversion circuit coupled between the universal plug and play type interface circuit and the rendezvous type interface circuit (**Fig. 1 #200 and Fig. 2), wherein the conversion circuit converts communications directed from the universal plug and play type device to the rendezvous type device into the rendezvous type protocol, and further wherein the conversion circuit converts communications directed from the rendezvous type device to the universal plug and play type device into the universal plug and play type protocol (¶0022, teaches the UPnP Enabling Device converting the communication to communicate between the networks in the proper protocols.).**

27. In regards to claim 32 Cheng discloses, wherein a conversion program used by the conversion circuit is stored within the conversion circuit (**¶0022, teaches the program that converts the communication is stored in the processor.).**

28. In regards to claim 38 Cheng discloses, a network of devices, operating under a plurality of protocols (**Fig. 1 #100), the network of devices comprising:**

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- p. a. one or more universal plug and play type devices operating under a universal plug and play type protocol (**Fig. 1 #100 and ¶0020 line(s) 12-19, teaches whereas each network is homogenous by stated that the UPnP enabling device connects multiple heterogeneous-networks.**);
- q. b. one or more rendezvous type devices operating under a rendezvous type protocol (**Fig. 1 #100 and ¶0020 line(s) 12-19, teaches whereas each network is homogenous by stated that the UPnP enabling device connects multiple heterogeneous-networks.**); and
- r. a converter configured to couple between a universal plug and play type device and a rendezvous type device to convert communications between the universal plug and play type device and the rendezvous type device into proper formats (**Fig. 1 #200 and ¶0020 line(s) 12-19, teaches the UPnP enabling device (converter) for converting communications for multiple heterogeneous-networks, UPnP and N-UPnP.**), comprising:
 - i. a. a universal plug and play type interface circuit configured to couple to a universal plug and play type device operating under a universal plug and play type protocol (**Fig. 2 #210 and ¶0022 line(s) 1-6, teaches a IP Network interface used for sending and receiving UPnP protocols being part of the UPnP enabling device (converter) circuit.**);
 - ii. b. a rendezvous type interface circuit configured to couple to a rendezvous type device operating under a rendezvous type protocol (**Fig.**

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2 #250_{a-d} and ¶0021, teaches varies N-UPnP interfaces, as part of the converter circuit, used for sending and receiving N-UPnP protocols.);

and

iii. c. a conversion circuit coupled between the universal plug and play type interface circuit and the rendezvous type interface circuit (**Fig. 1 #200 and Fig. 2**), wherein the conversion circuit converts communications directed from the universal plug and play type device to the rendezvous type device into the rendezvous type protocol, and further wherein the conversion circuit converts communications directed from the rendezvous type device to the universal plug and play type device into the universal plug and play type protocol (**¶0022, teaches the UPnP Enabling Device converting the communication to communicate between the networks in the proper protocols.**).

29. In regards to claim 41 Cheng discloses, wherein the converter is a stand-alone device coupled between the universal plug and play type devices and the rendezvous type devices (**Fig. 1 #200, teaches the UPnP Enabling Device (converter) as a stand-alone device couple between the N-UPnP and UPnP networks.**).

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

32. Claims 19, 28, 37, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (US PGPub 2002/0078161) as applied to claims 6, 11, 20, 29, and 38 above, and further in view of Cho (US PGPub 2003/0016682).

33. In regards to claims 19, 28, 37, and 44 Cheng does not disclose, wherein the rendezvous type interface circuit comprises a rendezvous type proxy which maintains a table of entries, each entry corresponding to a universal plug and play type device.

34. In the same field of endeavor Cho teaches a generic HAVI (Home Audio Video Interoperability) agent that includes a table that has entries corresponding to the UPnP devices (**Fig. 3 #311 and ¶0042 line(s) 13-18**).

35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng's UPNP enabling device for

heterogeneous network of slave devices with Cho's teaching as discussed above to allow for the capability of having an updated list of available devices therefore eliminating the step of asking if the device is available.

Conclusion

36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to La Juania N. Mouzon whose telephone number is 571-270-3045. The examiner can normally be reached on Monday - Friday 8:00-5:00, 1st Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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